REGION H
Water Planning Group

MEETING MATERIALS

February 5, 2024

Common Region H Terms and Conversion Factors

List of Abbreviations

CRU	Collective Reporting Unit
DCP	Drought Contingency Plan
DFC	Desired Future Condition
DOR	Drought of Record
EA	Executive Administrator
EPA	Environmental Protection Agency
FWSD	Fresh Water Supply District
GAM	Groundwater Availability Model
GCD	Groundwater Conservation District
GMA	Groundwater Management Area
GPCD	Gallons Per Capita Per Day
GRP	Groundwater Reduction Plan
IFR	Infrastructure Finance Report
IPP	Initially Prepared Plan
MAG	Modeled Available Groundwater
MPC	Master Planned Community
MUD	Municipal Utility District
MWP	Major Water Provider
PDSI	Palmer Drought Severity Index
PWS	Public Water Supply
RFPG	Regional Flood Planning Group
RHWPG	Region H Water Planning Group
ROR	Run-of-River
RWP	Regional Water Plan
RWPA	Regional Water Planning Area
RWPG	Regional Water Planning Group
SWIFT	State Water Implementation Fund for Texas
SWP	State Water Plan
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TWC	Texas Water Code
TWDB	Texas Water Development Board
UCM	Unified Costing Model
URS	Unique Reservoir Site
USS	Unique Stream Segment
WAM	Water Availability Model
WCID	Water Control and Improvement District
WCP	Water Conservation Plan
WMS	Water Management Strategy
WRAP	Water Rights Analysis Package
WUD	Water Utility Database
WUG	Water User Group
WWP	Wholesale Water Provider

Water Measurements

1 acre-foot (AF) = 43,560 cubic feet = 325,851 gallons

1 acre-foot per year (ac-ft/yr) = 325,851 gallons per year = 893 gallons per day

1 gallon per minute (gpm) = 1,440 gallons per day = 1.6 ac-ft/yr

1 million gallons per day (mgd) = 1,000,000 gallons per day = 1,120 ac-ft/yr

Region H Water Planning Group
10:00 AM Wednesday
February 5, 2025
San Jacinto River Authority Office
1577 Dam Site Rd, Conroe, Texas 77304

AGENDA

1. Call to order.
2. Introductions.
3. Review and approve minutes of the December 4, 2024 meeting.
4. **Receive public comments on specific issues related to agenda items 5 through 7**. (Public comments limited to 3 minutes per speaker)
5. Planning Group Membership
    a. Discuss and consider taking action to elect officers and members of the Executive Committee of the Region H Water Planning Group (RHWPG).
6. Plan Development and Administration
    a. Receive update from the Consultant Team regarding the draft 2026 Region H Initially Prepared Regional Water Plan (IPP).
    b. Consider and adopt the IPP and approve the Consultant Team to prepare final copies of the IPP and supporting documentation and submit to Texas Water Development Board (TWDB) no later than March 3, 2025.
    c. Receive update from Consultant Team regarding public hearings.
    d. Discuss and take action on approval of public hearing schedule for presentation of the 2026 Region H IPP and authorize San Jacinto River Authority and the Consultant Team to prepare and mail notices related to the public hearings.
7. General Updates and Outreach
    a. Receive update regarding schedule and milestones for the development of the 2026 Region H Regional Water Plan.
    b. Receive update from liaisons to other planning groups.
    c. Receive report regarding recent and upcoming activities related to communications and outreach efforts on behalf of the RHWPG.
    d. Receive update from TWDB.
    e. Other agency communications and general information.
8. **Receive public comments**. (Public comments limited to 3 minutes per speaker)
9. Next Meeting: May 7, 2025.
10. Adjourn.

Persons with disabilities who plan to attend this meeting and would like to request auxiliary aids or services are requested to contact Sonia Zamudio at (936) 588-3111 at least three business days prior to the meeting so that appropriate arrangements can be made.

Agenda Item 3

Review and approve minutes of the December 4, 2024 meeting.

REGION H
Water Planning Group

[Minutes to be Inserted Here]

REGION H
Water Planning Group

Agenda Item 5a

Discuss and consider taking action to elect officers and members of the Executive Committee of the Region H Water Planning Group (RHWPG).

REGION H
Water Planning Group

Agenda Item 5a
Officers and Executive Committee

Chair	• Executive officer • Preside over meetings
Vice-Chair	• Assist chair in duties • Act in chair's absence
Secretary	• Administer postings • Maintain meeting records
At-Large	• Facilitate administrative decisions • Carry out bylaws

Agenda Item 5a
Officers and Executive Committee

2024 Region H Voting Membership

Agriculture	• Caleb Cooper • Danny Pierce
Counties	• **Mark Evans (Chair)** • Byron Ryder • Loyd Smith
Electric Generating	• Carl Burch
Enviro.	• **John Bartos (Secretary)**
GMA	• Gary Ashmore • **David Bailey (Exec)**
Industries	• Jason Garrard • Cyndi Wagener
Municipal	• Greg Eyerly • Robert Istre
Public	• Ken Kramer
River Auth.	• Brad Brunett • Aubrey Spear • Kevin Ward
Small Business	• W.R. Baker • Ivan Langford • Mike O'Connell
Water District	• Jun Chang • **Marvin Marcell (Vice Chair)** • Mike Turco
Water Utility	• **Arthur Bredehoft (Exec)** • Alisa Max • Brandon Wade

Agenda Item 5a
Officers and Executive Committee

Action:

Elect officers and members of the Executive Committee of the RHWPG.

Agenda Item 6a

Receive update from the Consultant Team regarding the draft 2026 Region H Initially Prepared Regional Water Plan (IPP).

REGION H
Water Planning Group

Agenda Item 6a
IPP Updates

- Initial document for review
- Two volumes
- Brief summary of chapters
- Open for comment
- Adjustment
  - Before submittal
  - Post-IPP

Agenda Item 6a
IPP Updates

Agenda Item 6a
IPP Updates – Chapter 1

Description of Region

Chapter	Support
▪ Regional water planning in Texas ▪ Description of region ▪ Demands, sources, and providers ▪ Water quality and natural resources ▪ Existing water planning efforts	▪ Reference list

Agenda Item 6a
IPP Updates – Chapter 2

Projected Population and Water Demands

Chapter	Support
▪ Demands ▪ Methodology and baseline conservation ▪ MWP demands and contracts	▪ MWP summaries ▪ Emerging Tech. research

Agenda Item 6a
IPP Updates – Chapter 3

Analysis of Current Water Supplies

Chapter	Support
▪ Sources and analysis methods ▪ Total regional water availability ▪ MWPs and major supply contracts ▪ Detailed assignment of sources	▪ MPF documentation ▪ Model and right data ▪ MWP summaries

Agenda Item 6a
IPP Updates – Chapter 4

Analysis of Needs

Chapter	Support
▪ Identification and summary of needs ▪ Locations	▪ MWP summaries

Agenda Item 6a
IPP Updates – Chapter 5

Water Management Strategies

Chapter	Support
▪ Requirements ▪ Evaluation methodology and selection process ▪ Potentially feasible WMS and projects ▪ Recommendations, relationships, and MSF ▪ Unmet needs	▪ WMS tables ▪ Tech memos ▪ *Socioeconomic report*

Agenda Item 6a
IPP Updates – Chapter 5B

Conservation Recommendations

Chapter	Support
▪ Challenges ▪ Importance of conservation ▪ RWPG recommended conservation ▪ Current efforts in region ▪ WCP suggestions	▪ Water loss savings ▪ Advanced savings ▪ GPCD goals

Agenda Item 6a
IPP Updates – Chapter 6

Impacts of the Regional Water Plan

Chapter	Support

▪ Impacts on water quality
▪ Impacts of moving water from rural and ag areas
▪ Consistency with resource protection
  ▪ Water
  ▪ Agriculture
  ▪ Natural resources
  ▪ Navigation
	▪ 303(d) list
	▪ Ag Census
	▪ Land trends
	▪ T&E list
	▪ Impacts assessment

Agenda Item 6a
IPP Updates – Chapter 7

Drought Response

Chapter	Support
▪ Drought of record ▪ Current preparations in region ▪ Existing and potential interconnects ▪ Emergency responses ▪ Region-specific recommendations ▪ Drought management WMS discussion ▪ Other recommendations	▪ Preparation table ▪ Interconnects ▪ Potential responses ▪ Model DCPs

Agenda Item 6a
IPP Updates – Chapter 8

USS, URS, and Other Recommendations

Chapter	Support

▪ Unique stream segments
▪ Unique reservoir sites
▪ Other recommendations
  ▪ Regulatory
  ▪ Administrative
  ▪ Legislative
  ▪ Infrastructure finance
	▪ Recommendation details

Agenda Item 6a
IPP Updates – Chapter 9

Implementation and Comparison to Previous RWP

Chapter	Support
▪ 2021 RWP strategy implementation summary ▪ Numerical comparison to prior RWP ▪ Regionalization assessment	

Agenda Item 6a
IPP Updates – Chapter 10

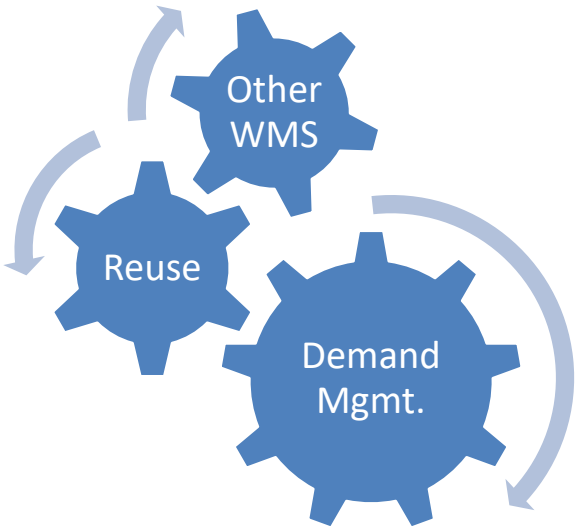
Adoption of Plan and Public Participation

Chapter	Support
▪ RWPG representation ▪ Outreach, notices, and websites ▪ RWPG meeting summaries ▪ Committee meeting summaries ▪ *Public review and comment (post-IPP)*	▪ *Hearing materials* ▪ *Public comments* ▪ *Responses*

Agenda Item 6a
IPP Updates – WMS Committee Recommendations

- Volume by WMS category figures
- Key WMS table clarifications
- Demand Management
  - Clarifications on methodology and savings potential
  - Reference TWDB resources for industry
  - Highlight demand management success stories

Agenda Item 6a
IPP Updates – Other Potential Fine Tuning



- Fine-tuning allocations
  - Conservation and reuse ripples
  - Interregional adjustments
- Project details and costs
- Implementation status

Draft 2026 RWP
WMS and Project Summaries

REGION H
Water Planning Group

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Table 1. Key Project Overview

Project	Potential Volume[1] (ac-ft)	Capital Cost ($)	Unit Cost ($/ac-ft)		Start Decade
			Start Decade	2080	
Conservation[2]					
Industrial Conservation	43,892	$305,856,311	$540	$247	2030
Irrigation Conservation	103,799	$2,521,185	$157	$155	2030
Municipal Conservation (Advanced Conservation)	140,597	$4,130,874,617	$1,770	$617	2030
Municipal Conservation (Water Loss Reduction)	89,637	$1,647,604,552	$761	$726	2030
Conveyance					
BWA Transmission and Storage Expansion	16,800	$84,794,502	$437	$82	2030
CHCRWA Transmission and Internal Distribution	5,466	$22,717,067	$314	$22	2030
City of Houston GRP Transmission	51,789	$260,640,042	$347	$50	2030
City of Houston Transmission Expansion	483,280	$508,742,379	$83	$11	2030
CWA Transmission Expansion	454,720	$497,255,512	$128	$28	2040
East Texas Transfer	250,000	$591,526,599	$189	$23	2050
LNVA Neches-Trinity Basin Interconnect	67,000	$127,821,515	$165	$31	2040
Manvel Supply Expansion	7,840	$62,235,692	$475	$57	2030
NFBWA Phase 2 Distribution Segments	62,496	$129,366,992	$166	$21	2030
NHCRWA Distribution Expansion	143,360	$1,228,464,604	$346	$60	2030
NHCRWA Transmission Lines	143,360	$453,864,685	$255	$32	2030
Southeast Transmission Line Improvements	57,575	$159,151,172	$213	$18	2030
WHCRWA Distribution Expansion	92,288	$391,325,873	$256	$36	2030
WHCRWA/NFBWA Transmission Line	169,030	$622,459,204	$297	$38	2030
Groundwater Development					
Brackish Groundwater Development[3]	Varies	Varies by WUG	Varies	Varies	2030
BWA Brackish Groundwater Development	13,440	$74,055,688	$830	$442	2030
City of Houston Area 2 Groundwater Infrastructure	50,400	$150,754,783	$482	$271	2030
City of Houston Repump and GW Plant Improvements	97,440	$173,600,899	$287	$45	2030
Expanded Use of Groundwater[3]	41,178	Varies by WUG	Varies	Varies	2030
Fairchilds Supply Infrastructure	2,128	$103,900,000	$3,337	$862	2030
GCWA Groundwater Well Development	35,840	$28,564,015	$118	$62	2040
SJRA Catahoula Aquifer Supplies	10,500	$22,386,712	$486	$336	2080
Groundwater Reduction Plans					
CHCRWA GRP[4]	5,466	$0	$0	$0	2030
City of Houston GRP[4]	60,766	$0	$0	$0	2030
City of Missouri City GRP	11,200	$58,835,350	$608	$239	2030
City of Richmond GRP	6,720	$85,626,919	$1,252	$355	2030
City of Rosenberg GRP	3,920	$17,081,984	$344	$37	2030
City of Sugar Land IWRP	16,724	$205,801,341	$1,716	$511	2030
Fort Bend County MUD 25 GRP	1,120	$11,567,244	$784	$58	2030
Fort Bend County WCID 2 GRP	6,720	$71,687,468	$1,144	$393	2030
Montgomery County MUDs 8 and 9 Supply Expansion	2,240	$53,547,608	$3,061	$1,379	2030

Project	Potential Volume[1] (ac-ft)	Capital Cost ($)	Unit Cost ($/ac-ft)		Start Decade
			Start Decade	2080	
Montgomery County Supply Expansion	75,000	$779,670,291	$829	$387	2030
NFBWA GRP[4]	62,496	$0	$0	$0	2030
NHCRWA GRP[4]	143,360	$0	$0	$0	2030
WHCRWA GRP[4]	92,288	$0	$0	$0	2030
Reuse					
City of Houston Reuse	191,139	$820,816,940	$536	$213	2040
City of Pearland Reuse	1,154	$24,161,522	$1,565	$210	2040
League City Effluent Reuse	11,200	$4,686,566	$66	$4	2030
NFBWA Member District Reuse	4,280	$58,450,435	$1,708	$747	2030
NHCRWA Member District Reuse	300	$5,441,580	$2,206	$929	2030
River Plantation Reuse[5]	25	$0	$0	$0	2030
San Jacinto Basin Regional Return Flows[4]	100,445	$0	$0	$0	2030
Texas City Industrial Complex Reuse	11,200	$45,700,000	$344	$57	2040
Wastewater Reclamation for Municipal Irrigation	15,139	$310,466,162	$3,172	$1,458	2030
Westwood Shores MUD Reuse	150	$2,476,273	$2,162	$1,001	2030
Surface Water Development					
Allens Creek Reservoir	99,650	$493,919,561	$279	$47	2040
BWSC Reservoir and Pump Station Expansion	80,000	$452,434,516	$465	$67	2030
GCWA Coastal Desalination	22,400	$283,297,581	$2,207	$1,317	2040
Treatment					
BAWA East SWTP Expansion	13,440	$124,515,458	$868	$217	2030
BWA Conventional Treatment Expansion	8,400	$23,244,186	$400	$205	2030
City of Houston EWPP Enhancement	470,400	$5,000,000,000	$1,492	$744	2040
Harris County MUD 50 Surface Water Treatment Plant	560	$22,804,420	$4,994	$2,129	2030
Northeast Water Purification Plant Expansion	340	$2,153,107,392	$649	$355	2030
Pearland Surface Water Treatment Plant	22,400	$261,245,745	$1,170	$349	2030
SEWPP Expansion	134,400	$1,116,248,913	$457	$353	2030
Other Infrastructure					
Brazos Saltwater Barrier	10,000	$77,571,019	$596	$51	2030
GCWA Canal Lining and Loss Mitigation	8,960	$12,393,000	$111	$13	2030
GCWA Shannon Pump Station Expansion	201,600	$81,410,301	$120	$27	2030
LNVA Devers Pump Station Relocation	88,704	$21,337,986	$21	$4	2030

1. *Volumes listed in this table represent the maximum anticipated volume associated with the projects rather than new increments of yield. Volumes shown in this table may overlap and are not necessarily additive.*
2. *It should be noted that costs for municipal water conservation programs represent a total cost for offsetting a unit volume of water at the point of delivery. A number of strategies require multiple projects or project components (source generation, treatment, transmission, etc.) working in conjunction to meet needs at points of use. Therefore, the additive nature of these costs must be considered when they are compared with and contrasted against conservation programs.*
3. *Includes brackish groundwater projects implemented under Expanded Use of Groundwater. Costs vary by WUG.*
4. *Costs, including construction costs, engineering, legal, and permitting fees, land acquisition, and other capital costs, are included under associated infrastructure projects.*
5. *Supply generated through expanded use of existing infrastructure. Cost estimated to be minimal.*

Table 2. WMS and Key Project Relationships

Water Management Strategy*	WMS Project Name
Additional Supply from BRA	Allens Creek Reservoir
Additional Supply from GCWA	Allens Creek Reservoir
	GCWA Canal Lining and Loss Mitigation
	GCWA Shannon Pump Station Expansion
BAWA East SWTP Expansion	BAWA East SWTP Expansion
Brackish Groundwater Supplies	WUG Infrastructure Expansion (WUG-level projects)
Brazos Saltwater Barrier	Brazos Saltwater Barrier
BWSC Reservoir and Pump Station Expansion	BWA Conventional Treatment Expansion
	BWA Transmission and Storage Expansion
	BWSC Reservoir and Pump Station Expansion
CHCRWA GRP	CHCRWA Transmission and Internal Distribution
	Northeast Water Purification Plant Expansion
City of Houston Area 2 Groundwater Development	City of Houston Area 2 Groundwater Infrastructure
City of Houston GRP	City of Houston EWPP Enhancement
	City of Houston GRP Transmission
	City of Houston Repump and GW Plant Improvements
	City of Houston Transmission and Distribution Expansion
	CWA Transmission Expansion
	Northeast Water Purification Plant Expansion
	SEWPP Expansion
City of Houston Reuse	City of Houston Reuse
City of Pearland Reuse	City of Pearland Reuse
East Texas Transfer	East Texas Transfer
Expanded Use of Groundwater	Expanded Use of Groundwater (WUG-level projects)
Fairchilds Supply Infrastructure	Fairchilds Supply Infrastructure
Fort Bend MUD 25 GRP	Fort Bend MUD 25 GRP
Fort Bend WCID 2 GRP	Fort Bend WCID 2 GRP
GCWA Coastal Desalination	GCWA Coastal Desalination
	GCWA Shannon Pump Station Expansion
GCWA Groundwater Well Development	GCWA Groundwater Well Development
Harris County MUD 50 SWTP	Harris County MUD 50 SWTP
Industrial Conservation	Industrial Conservation
Irrigation Conservation	Irrigation Conservation
League City Effluent Reuse	League City Effluent Reuse
LNVA Devers Pump Station Relocation	LNVA Devers Pump Station Relocation
LNVA Neches-Trinity Basin Interconnect	LNVA Neches-Trinity Basin Interconnect
Manvel Supply Expansion	Manvel Supply Expansion
Missouri City GRP	City of Missouri City GRP
Montgomery County MUDs 8 and 9 Supply Expansion	Montgomery County MUDs 8 and 9 Supply Expansion
Montgomery County Supply Expansion	Montgomery County Supply Expansion
	SJRA Catahoula Aquifer Supplies
Municipal Conservation	Adv. Municipal Conservation (WUG-level projects)

Water Management Strategy*	WMS Project Name
New / Expanded Contract with BWA	BWA Brackish Groundwater Development
	BWA Transmission and Storage Expansion
New / Expanded Contract with City of Houston	City of Houston EWPP Enhancement
	City of Houston Repump and Groundwater Plant Improvements
	City of Houston Reuse
	Northeast Water Purification Plant Expansion
New / Expanded Contract with GCWA	Allens Creek Reservoir
	GCWA Canal Lining and Loss Mitigation
	GCWA Shannon Pump Station Expansion
New / Expanded Contract with Regional Providers	WUG Infrastructure Expansion (WUG-level projects)
NFBWA GRP	City of Houston Reuse
	NFBWA Phase 2 Distribution Segments
	Northeast Water Purification Plant Expansion
	WHCRWA/NFBWA Transmission Line
NFBWA Member District Reuse	NFBWA Member District Reuse Infrastructure
NHCRWA GRP	City of Houston Reuse
	NHCRWA Distribution Expansion
	NHCRWA Transmission Lines
	Northeast Water Purification Plant Expansion
NHCRWA Member District Reuse	NHCRWA Member District Reuse Infrastructure
Pearland SWTP	Pearland Surface Water Treatment Plant
Richmond GRP	Allens Creek Reservoir
	City of Richmond GRP
Rosenberg GRP	BWA Conventional Treatment Expansion
	City of Rosenberg GRP
Southeast Transmission Line Expansion	SEWPP Expansion
	Southeast Transmission Line Improvements
Sugar Land IWRP	Sugar Land Advanced Demand Management
	Sugar Land IWRP
Texas City Industrial Complex Reuse	Texas City Industrial Complex Reuse
Wastewater Reclamation for Municipal Irrigation	Wastewater Reclamation for Municipal Irrigation
Water Loss Reduction	Water Loss Reduction (WUG-level projects)
Westwood Shores MUD Reuse	Westwood Shores MUD Reuse
WHCRWA GRP	City of Houston Reuse
	Northeast Water Purification Plant Expansion
	WHCRWA Distribution Expansion
	WHCRWA/NFBWA Transmission Line

**WMS and project names included in the TWDB Regional Planning database (DB27) may vary slightly from those shown in this summary table where necessary due to the DB27 data structure and to properly reflect project phasing and project type.*

Table 3. Supply Source Increases Associated with Recommended WMS

Source	Yield Type	New or Increased Source Supply (ac-ft)					
		2030	2040	2050	2060	2070	2080
Conservation							
Industrial Conservation	New	3,320	10,414	18,171	26,242	34,806	43,892
Irrigation Conservation	New	103,799	103,799	103,799	103,799	103,799	103,799
Municipal Conservation	New	42,816	80,546	94,539	111,293	119,921	140,597
Water Loss Reduction	New	8,389	25,726	43,579	60,827	75,740	89,637
Groundwater							
Gulf Coast Aquifer System, Montgomery (Catahoula Formation)	Increased	745	1,322	1,744	1,979	2,237	12,976
Surface Water							
Allens Creek Lake/Reservoir	New	0	99,650	99,650	99,650	99,650	99,650
Brazos Run-of-River, Brazoria	Increased	10,000	10,000	10,000	10,000	10,000	10,000
Harris Reservoir	New	80,000	80,000	80,000	80,000	80,000	80,000
Gulf of Mexico Saline	New	0	22,400	22,400	22,400	22,400	22,400
Reuse							
Direct Reuse, County-Other, Montgomery	Increased	215	838	1,465	1,952	2,320	2,570
Direct Reuse, Fort Bend County MUD 25	Increased	68	68	68	68	68	68
Direct Reuse, Galveston County Industries	New	0	11,200	11,200	11,200	11,200	11,200
Direct Reuse, League City	Increased	5,600	6,720	7,840	8,960	10,080	11,200
Direct Reuse, Master Planned Communities, Brazoria County	New	42	110	192	228	269	313
Direct Reuse, Master Planned Communities, Chambers County	New	22	126	281	429	589	771
Direct Reuse, Master Planned Communities, Fort Bend County	New	517	1,817	3,189	4,326	5,472	6,517
Direct Reuse, Master Planned Communities, Harris County	New	852	1,616	2,119	2,393	2,893	3,252
Direct Reuse, Master Planned Communities, Liberty County	New	66	232	434	653	866	1,097
Direct Reuse, Master Planned Communities, Waller County	New	36	92	196	327	468	619
Direct Reuse, Missouri City	New	579	678	725	747	786	804
Direct Reuse, North Fort Bend Water Authority	Increased	4,280	4,280	4,280	4,280	4,280	4,280
Direct Reuse, North Harris County Regional Water Authority	Increased	300	300	300	300	300	300
Direct Reuse, Pearland	New	0	314	1,154	1,154	1,154	1,154
Direct Reuse, Quail Valley UD	Increased	59	84	94	140	164	188
Direct Reuse, River Plantation MUD	Increased	25	25	25	25	25	25
Direct Reuse, Sienna Plantation	Increased	2,706	2,785	2,903	2,955	3,013	3,092
Direct Reuse, Sugar Land	Existing	1,232	1,680	2,912	2,912	2,912	2,912
Direct Reuse, Westwood Shores MUD	New	150	150	150	150	150	150
Indirect Reuse, Houston	New	0	159,855	163,963	165,839	165,168	165,705
San Jacinto Regional Return Flows	New	75,463	77,888	93,415	96,281	99,677	100,445

**Includes savings volumes for Sugar Land Advanced Demand Management.*

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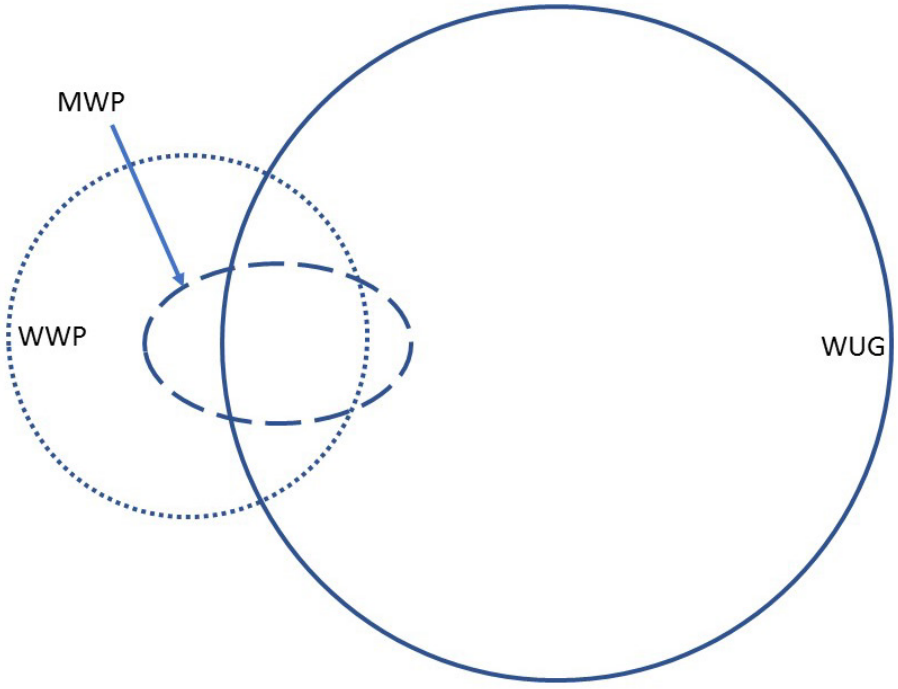
FEBRUARY 2018

Water User Groups, Wholesale Water Providers, and Major Water Providers in Regional Water Planning

Regional water planning groups (RWPG) are required by rule to specifically consider three, often overlapping, planning units, Water User Groups (WUG), Wholesale Water Providers (WWP), and Major Water Providers (MWP), when developing their plans. This document explains what these entities are, how they relate, and how they may overlap. Keep in mind throughout this discussion that a single entity may simultaneously be designated as a WUG, WWP, and MWP, as summarized in Figure 1. Note that an MWP must also be at least a WUG or a WWP.

Figure 1: Ven relationship between three categories of planning units in regional water plans



Water User Groups

WUGs are the entities for which water demand projections are developed by the Texas Water Development Board (TWDB) and that form the underlying—and highest resolution—basis for each regional water plan and the state water plan. Water demands, existing water supplies, and water needs (or surpluses) are evaluated for all WUGs. The Texas state water plan focuses on addressing the identified water needs of the 2,900 WUGS within Texas that fall within six categories (municipal, irrigation, manufacturing, livestock, mining, and steam-electric power). The Texas state water plan presents all information, including information in the interactive state water plan, on a WUG-centric basis.

Wholesale Water Providers

Another type of entity critical to plan development is the wholesale water provider, or WWP. For an entity to be designated as a WWP for planning purposes, it must sell or deliver (or plan to sell or deliver) wholesale water at some point in the 50-year planning horizon, as defined in 31 Texas Administrative Code (TAC) §357.10(43). If, for example, a WUG provides water to retail users as well as wholesale to other entities, it may also be considered a WWP (Figure 1). Regional water planning groups determine the WWPs that they want to utilize in their plan development based upon the known wholesale transactions that occur within the regional water planning area. Data analyses of identified WWPs occur in the evaluation of contractual obligations to supply water, the demands associated with WUGs served by the WWP, and the evaluation of the WWP's existing water supplies. Even though the RWPG is not required to specifically report basic information on WWP demands and supplies in the regional water plan,[1] it will need to do so in at least two specific instances, including:

- **if that same entity is also designated by the RWPG as a MWP, or**
- **if that WWP is designated as the "sponsor" of any recommended water management strategy project (WMSP) in the plan, through TWDB-generated data reports. The WWP information will provide the basis for the WWP WMSP or water management strategy.**

These are minimum reporting requirements; however, an RWPG may present more WWP information utilized in the development of its plan. **The extent to which RWPGs report on WWPs is left largely to the discretion of the RWPGs.**

Major Water Providers

The new category of "Major Water Providers" was established in rules for the development of the 2022 State Water Plan in conjunction with the removal of certain reporting requirements[2] to allow RWPGs to establish a more static list of large water providers for which they report information and to provide regional water planning groups with more flexibility in deciding which large (relative to each region) water provider(s) they want to report information on in their regional water plans. Major water providers represent WWPs and/or WUGs that use, and/or are responsible for developing and/or delivering significant quantities of water in the region. It is up to each region to decide which entities are designated as MWPs.

The intent of the MWP category is to report data for entities of significance to the region.[3] If the region decides not to designate any entities as MWPs, the plan needs to include discussion in Chapter One as to why the RWPG determined it does not have any WUGs or WWPs of significance to the region's water supply.

Definitions:

Water User Group (WUG) (31 TAC §357.10(42)) – Identified user or group of users for which water demands and existing water supplies have been identified and analyzed and plans developed to meet water needs. A

[1] Previously, TWDB administrative rules required that regional water planning groups report supply, demand, and water management strategy data for WWPs as well as describe those WWPs in Chapter One of their plans. However, this requirement was removed at the request of stakeholders including for the reason that the volumetric threshold previously applied to the WWP definition proved problematic in certain regional water planning areas due to fluctuations in reported use between planning cycles and due to the relative scale in both smaller and larger regional water planning areas.

[2] See footnote 1.

[3] Instead of reporting data for every WWP in the region, as was previously required per footnote 1.

municipal WUG is a utility-based entity as defined in 31 TAC §357.10(42). Rural municipal water use that falls outside of the service area of discrete municipal water provider boundaries is aggregated at the county level as "county-other."
These include

A. *privately-owned utilities that provide an average of more than 100 acre-feet per year (AFY) for municipal use for all owned water systems;*
B. *water systems serving institutions or facilities owned by the state or federal government that provide more than 100 AFY for municipal use;*
C. *all other Retail Public Utilities not covered in (A) or (B) above that provide more than 100 AFY for municipal use;*
D. *collective Reporting Units, or groups of Retail Public Utilities that have a common association and are requested for inclusion by the RWPG;*
E. *municipal and domestic water use, referred to as County-Other, not included in A–D above; and*
F. *non-municipal water use including manufacturing, irrigation, steam-electric power generation, mining, and livestock watering for each county or portion of a county in a regional water planning area.*

Wholesale Water Provider (WWP) (31 TAC §357.10(43)) – Any person or entity, including river authorities and irrigation districts, that delivers or sells water wholesale (treated or raw) to WUGs or other WWPs or that the regional water planning group expects or recommends to deliver or sell water wholesale to WUGs or other WWPs during the period covered by the plan. The regional water planning groups shall identify the WWPs within each region to be evaluated for plan development.

Major Water Provider (MWP) (31 TAC §357.10(19)) – A WUG or WWP of particular significance to the region's water supply as determined by the regional water planning group. This may include public or private entities that provide water for any water use category.

For additional information on the regional water planning process and current activities, please call 512-936-2387 or visit www.twdb.texas.gov/waterplanning/rwp/index.asp.

Agenda Item 6b

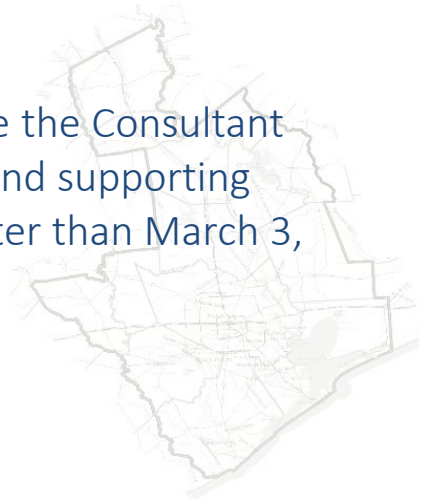
Consider and adopt the IPP and approve the Consultant Team to prepare final copies of the IPP and supporting documentation and submit to Texas Water Development Board (TWDB) no later than March 3, 2025.

REGION H
Water Planning Group

Agenda Item 6b
IPP Adoption

Action:

Move to adopt and certify the IPP, approve the Consultant Team to prepare final copies of the IPP and supporting documentation, and submit to TWDB no later than March 3, 2025.



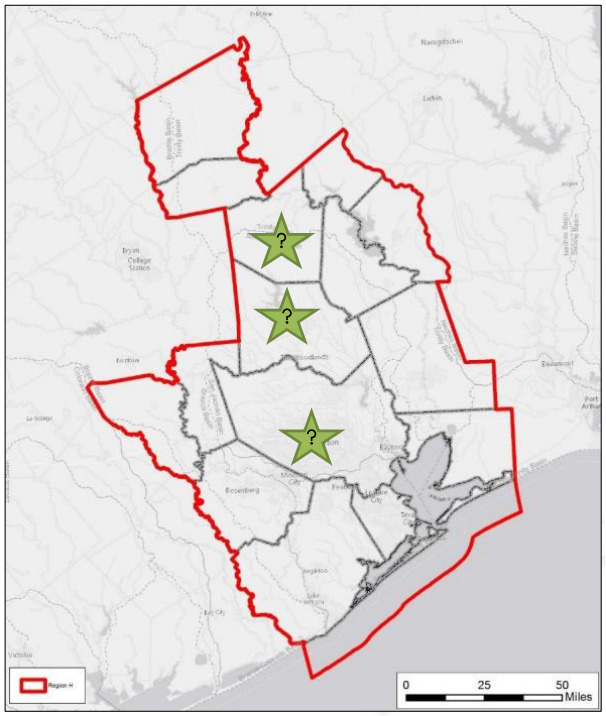
Agenda Item 6c

Receive update from Consultant Team regarding public hearings.

REGION H
Water Planning Group

Agenda Item 6c
Public Hearings

- Minimum of one public hearing
- Region H usually holds several
- Typically ≈one month after IPP delivery
- Mid-April to mid-May
- Hybrid option?



Agenda Item 6d

Discuss and take action on approval of public hearing schedule for presentation of the 2026 Region H IPP and authorize San Jacinto River Authority and the Consultant Team to prepare and mail notices related to the public hearings.

REGION H
Water Planning Group

Agenda Item 6d
Hearing Notice

Action:

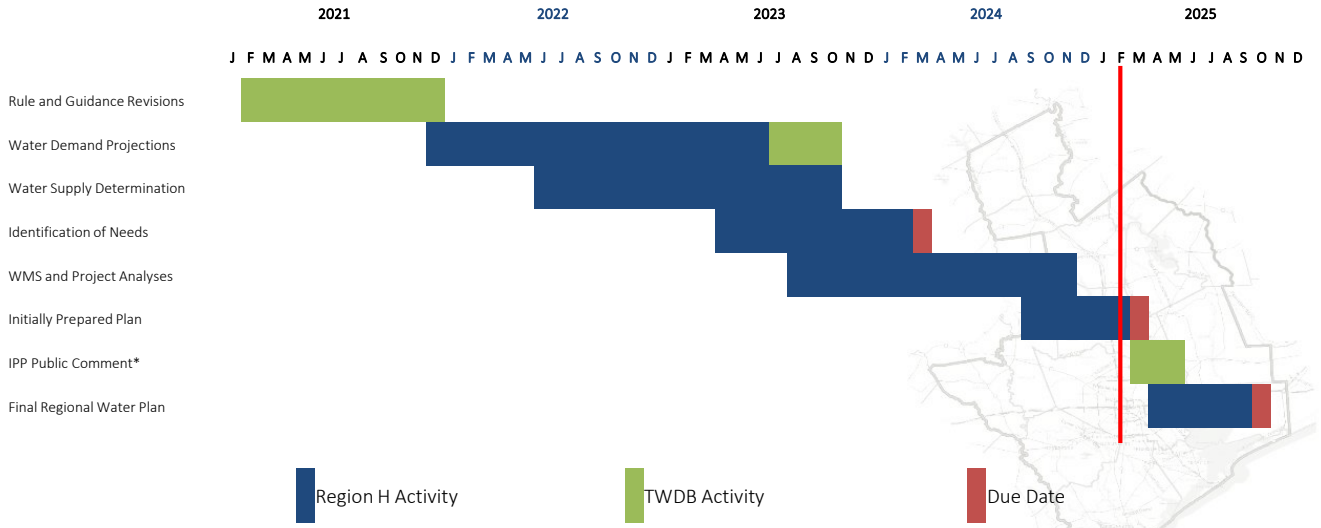
Approve public hearing schedule for presentation of the 2026 Region H Initially Prepared Regional Water Plan and authorize San Jacinto River Authority and the Consultant Team to prepare and mail notices related to the public hearings.

Agenda Item 7a

Receive update regarding the schedule and milestones for the development of the 2026 Region H RWP.

REGION H
Water Planning Group

Agenda Item 7a
2026 RWP Schedule



*Region H accepts public comment throughout the planning cycle and at each RWPG and committee meeting.

Agenda Item 7a
2026 RWP Schedule

Date	Scheduled Events/Tasks
02/2025	RWPG Meeting and IPP Approval
03/2025	IPP due to TWDB
04/2025	IPP Public Hearings
05/2025	RWPG Meeting
06/2025	89th Texas Legislature closes
10/2025	RWP due to TWDB

2026 Regional Water Plans

Summary of posting requirements for public hearings for Initially Prepared Plans (IPP), adoption of IPPs, and adoption of final regional water plans

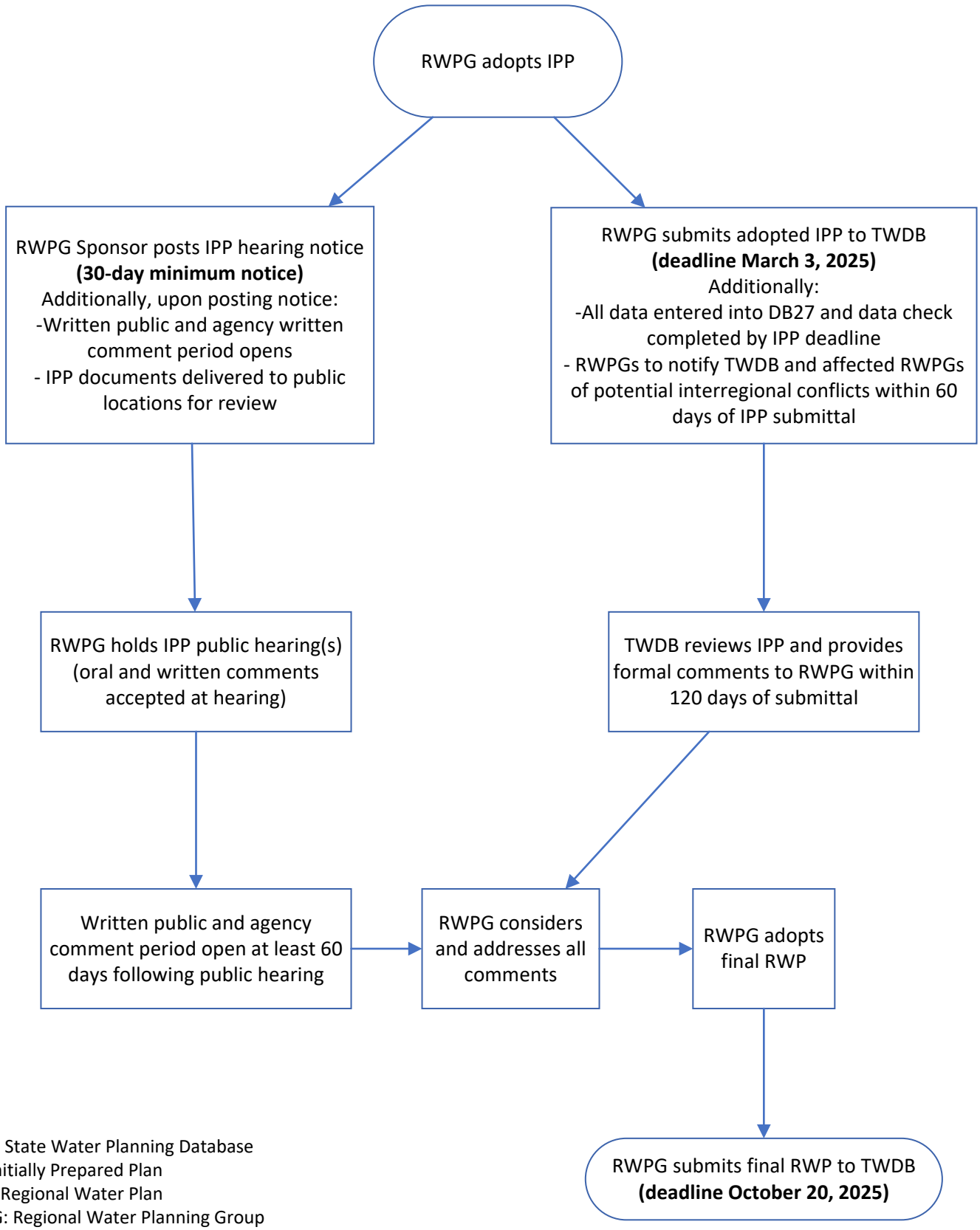
See 31 Texas Administrative Code § 357.21 for detailed posting information

Posting requirements	Public hearing for IPP	Adoption of IPP	Adoption of final plan
Minimum notice posting timeframe			
7 days prior the meeting		✓	
14 days prior the meeting			✓
30 days prior the hearing	✓		
Notice must contain			
1) Date, time, and location of the public meeting or hearing; 2) summary of the proposed action(s) to be taken; 3) the name, telephone number, email address, and physical address of a contact person to whom questions or requests for additional information may be submitted; 4) a statement of how and when comments will be received from the members and public	✓	✓	✓
Locations of IPPs available for public inspection	✓		
Minimum written comment period			
14 days prior the meeting			✓
30 days prior to the hearing **and** until 60 days following the public hearing	✓		
Entities notified			
All voting and non-voting RWPG members	✓	✓	✓
Any person or entity who has requested notice of RWPG activities	✓	✓	✓
Each RWPG where a recommended or alternative WMS being considered would be located	✓	✓	✓
Each adjacent RWPG	✓		
Each mayor of a municipality, located in whole or in part in the RWPA, with a population of 1,000 or more or which is a county seat	✓		
Each county judge of a county located in whole or in part in the RWPA	✓		
Each special or general law district or river authority with responsibility to manage or supply water in the RWPA (based upon list obtained from TCEQ)	✓		
Each Retail Public Utility, defined as a community water system, that serves any part of the RWPA or receives water from the RWPA (based upon list obtained from TCEQ)	✓		
Each holder of record of a water right for the use of surface water the diversion of which occurs in the RWPA (based upon list obtained from TCEQ)	✓		
Posting venues			
RWPG website	✓	✓	✓
Texas Secretary of State website	✓	✓	✓
Published in a newspaper of general circulation in each county located in whole or part in the RWPA (before the 30th day preceding the date of the public meeting or hearing)	✓		

Posting requirements	Public hearing for IPP	Adoption of IPP	Adoption of final plan
Document provision			
Documents to be made available on the internet or in hard copy for public inspection prior to and following the meeting include: 1) meeting agenda, and 2) copies of all materials, reports, and/or plans presented or discussed at the meeting	✓	✓	✓
Copies of the IPPs must be available for public inspection in: 1) at least one public library in each county, **and** 2) either the county courthouse's law library, the county clerk's office, or some other accessible place within the county courthouse of each county having land in the RWPA. According to the capabilities of the facility, the RWPG may provide copies electronically, on electronic media, through an internet web link, or in hard copy	✓		
Minimum document posting timeframe			
3 days prior the meeting and 7 days following the meeting		✓	
7 days prior the meeting and 14 days following the meeting			✓
Copies of IPP: 30 days prior the hearing and 60 days following the hearing; additional meeting materials: 7 days prior to and 30 days following the hearing	✓		
Open Meeting Act and Public Information Act			
Each RWPG and any committee or subcommittee of an RWPG are subject to Chapters 551 [Open Meetings Act] and 552 [Public Information Act], Government Code. A copy of all materials presented or discussed at an open meeting shall be made available for public inspection prior to and following the meetings and shall meet the additional notice requirements when specifically referenced as required under subsections	✓	✓	✓

Initially Prepared Plan and Final Regional Water Plan Process Schematic

2026 Regional Water Plans



DB27: State Water Planning Database
IPP: Initially Prepared Plan
RWP: Regional Water Plan
RWPG: Regional Water Planning Group
TWDB: Texas Water Development Board
Updated 10/1/24

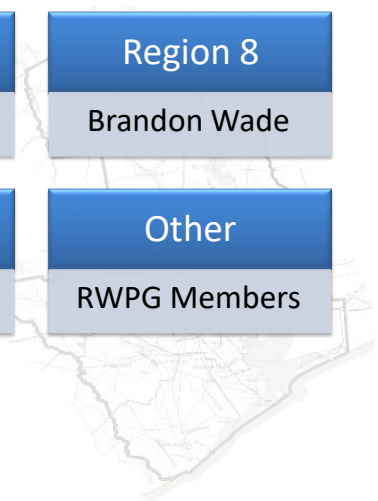
Agenda Item 7b

Receive update from liaisons to other planning groups.

REGION H
Water Planning Group

Agenda Item 7b
Liaison Updates

Region C	Brazos G	Region 6	Region 8
Kevin Ward	Zach Holland	Alisa Max	Brandon Wade
IPC / Chairs	GMA 12	GMA 14	Other
Mark Evans	David Bailey	Gary Ashmore	RWPG Members



Agenda Item 7d

Receive update from TWDB.

REGION H
Water Planning Group

From:	RegionalWaterPlanning
To:	RegionalWaterPlanning
Cc:	OOP-WSP-RWP; Temple McKinnon; Reem Zoun; Matt Nelson
Subject:	Resources for IPP and Final Regional Water Plan Processes
Date:	Tuesday, October 8, 2024 3:25:19 PM
Attachments:	2026 RWP_TWDB IPP Review Checklist_External Version_100424.xlsx

Good afternoon,

TWDB staff have updated the following three resources to assist RWPGs with preparing for adoption and submittal of the Initially Prepared Plans (IPPs), public comment period, and adoption of the final regional water plans:

1. IPP and Final Regional Water Plan Process Schematic: A schematic showing the IPP and final plan submittal and IPP hearing and public comment process.
2. IPP and Final Regional Water Plan Public Notice Summary: A list of the public notice requirements associated with the IPP adoption, IPP public hearing, and final plan adoption.
3. IPP Review Checklist (attached): This is a version of the checklist TWDB staff will utilize to conduct the review of each IPP to ensure statute, rule, and contract requirements are met. This checklist is being provided as a tool to assist RWPGs in meeting TWDB IPP review requirements. It is not required for RWPGs to utilize or include this spreadsheet with the IPPs. TWDB staff will also conduct additional data reviews that may not be captured in the attached checklist

Additional IPP related information:

- Requirements for IPPs to be considered administratively complete are listed in the TWDB Contract Exhibit C, Section 2.12.2.
- In accordance with the TWDB contract (Section II, Article III), all data must be entered into the state water planning database and all data checks must be completed prior to the IPP deadline.
- TWDB staff is working on obtaining updated contact lists from the TCEQ (for water right holders and public water utilities), required for the IPP public hearing, and will notify RWPGs when those lists are updated on our website.

Please don't hesitate to reach out if you have any questions about any of the IPP or final plan requirements.

This email has been sent to RWPG chairs, sponsors, and technical consultants.

Best,

Sarah Lee
Manager, Regional Water Planning
Water Supply Planning Division
Texas Water Development Board
P.O. Box 13231, Austin, TX 78711

From:	RegionalWaterPlanning
To:	RegionalWaterPlanning
Cc:	OOP-WSP-RWP; Temple McKinnon; Reem Zoun; Matt Nelson
Subject:	Regional Water Plan Accessibility Requirements
Date:	Monday, October 28, 2024 2:59:10 PM

Good afternoon,

As a reminder, per the TWDB regional water planning grant contracts, the final regional water plans must be compliant with "1 Texas Administrative Code Chapters 206 and 213 (related to Accessibility and Usability of State Web Sites, Web Content Accessibility Guidelines (WCAG) 2.1 Level AA Standard – WCAG 2.1 Quick Reference"

To meet minimum accessibility requirements, TWDB will check the initially prepared plans and final 2026 Regional Water Plans for the following four (4) items:

1. Is the primary language set to English?
2. Does the PDF have a good document title?
3. Is the primary view set to the document title?
4. Is the PDF a tagged document?

The accessibility checklist provided via email on May 30, 2023 provides guidance on how to check the items above. The accessibility checklist is not required to be used or returned with the 2026 Regional Water Plans, but contractors should be aware that the checklist will be required in future regional water planning grant contracts.

This email has been sent to RWPG sponsors and technical consultants.

Best,

Sarah Lee
Manager, Regional Water Planning
Water Supply Planning Division
Texas Water Development Board
P.O. Box 13231, Austin, TX 78711
512-936-2387 | sarah.lee@twdb.texas.gov
www.twdb.texas.gov

DECEMBER 2024

Strategies and projects that provide both water supply and flood mitigation

While developing the state water and flood plans, certain strategies and projects under consideration may provide benefits to both water supply and flood mitigation, though the potential overlap between them is relatively limited.

It is important to understand that water supply planning and flood risk mitigation planning deal with fundamentally different hydrologic events. For example, the storage volume within a reservoir cannot be simultaneously used for both flood mitigation *and* water supply purposes.[1] The goal of flood mitigation storage is to keep the reservoir as empty as possible so it is ready for the next storm. Whereas the goal of water supply storage is to keep the reservoir as full as possible in preparation for drought.

This information sheet is intended to provide general guidance in determining the appropriate plans for strategies and projects where overlap may cause confusion.

Flood flows already play a major role in the state water plan

It is important to note that storm/flood waters play an important role in the regional and state water planning process as they are already accounted for in the surface water availability models and provide the basis for much of Texas' existing water supplies via surface water reservoirs that capture them. These types of flows are also relied on, and modeled using the water availability models, for future recommended water supply reservoirs and other projects in the state water plan. Although flood flows are captured *and held* in water supply reservoirs, water supply reservoirs are not sited, designed, or operated to provide flood protection; although, in some cases, they may provide some incidental flood mitigation benefits. There are some multi-purpose reservoirs designed and operated to provide both water supply and flood protection, but as previously mentioned, the storage space used for flood protection cannot also be used for water supply.

Water Supply Planning

The regional and state water plans are developed to ensure adequate water supply during drought of record conditions. A water management strategy is a plan to meet an identified need for additional water by an entity, which can mean increasing the total water supply or maximizing an existing supply, including by reducing water demands. A water management strategy project is a water project that has a non-zero capital cost and is developed to implement a water management strategy.

Among the requirements for determining whether a water management strategy or project should be in the regional and state water plan, the following is key criteria:

- The strategy or project must reduce the consumption of water; reduce the loss or waste of water; improve the efficiency in the use of water; or develop, deliver, and/or treat additional water supply volumes to water user groups or wholesale water providers when implemented in at least one planning decade such that a firm yield of water is available during drought of record conditions.

Flood Mitigation Planning

The overarching goal of the flood planning process is to develop regional and state flood plans that provide for the protection of life and property without negatively affecting neighboring areas. The flood planning process focuses on reducing the

[1] Sometimes these competing goals can work together, such as with initiatives like Forecast Informed Reservoir Operations (FIRO). FIRO activities, which require real-time watershed monitoring, sophisticated modeling, and sophisticated decision-making tools using dedicated resources, seek to leverage weather forecasts to help decide when to hold water in the reservoir (minimal rain or incoming flows) versus when to release water from the reservoir (in anticipation of incoming floodwater).

existing flood risk and preventing additional future flood risk.

A flood mitigation project is a proposed structural or non-structural project that has non-zero capital costs and/or other non-recurring costs and, when implemented, will reduce flood risk. A flood management strategy is a proposed plan to reduce flood risk or mitigate flood hazards to life or property that does not qualify as a flood management evaluation or a flood mitigation project. Among the criteria for determining whether a project or strategy should be in the regional and state flood plan, the following is key:

- The primary function of each recommended flood mitigation project must be flood risk reduction. Additionally, they must include quantifiable flood risk reduction benefits that, at a minimum, consider mitigation for flood events associated with a 1 percent annual chance (100-year flood) where feasible.[2]

Decision Points

While the Texas Water Code requires that the state flood plan must "contribute to water development where possible," there is no requirement in water supply planning statutes to consider incidental flood mitigation benefits.

Some flood mitigation projects may provide incidental or indirect benefits to water resources or water supplies that do not provide measurable and reliable water supply. However, if the flood strategy or project is capable of producing additional, measurable water supply volumes under drought of record conditions, it could potentially be considered for inclusion as a water supply strategy/project in the regional and state water plans, subject to meeting the associated water planning requirements and at the discretion of the regional water planning group.

For a visual illustration of how certain projects may fit into one or both regional plans, see Figure 1.

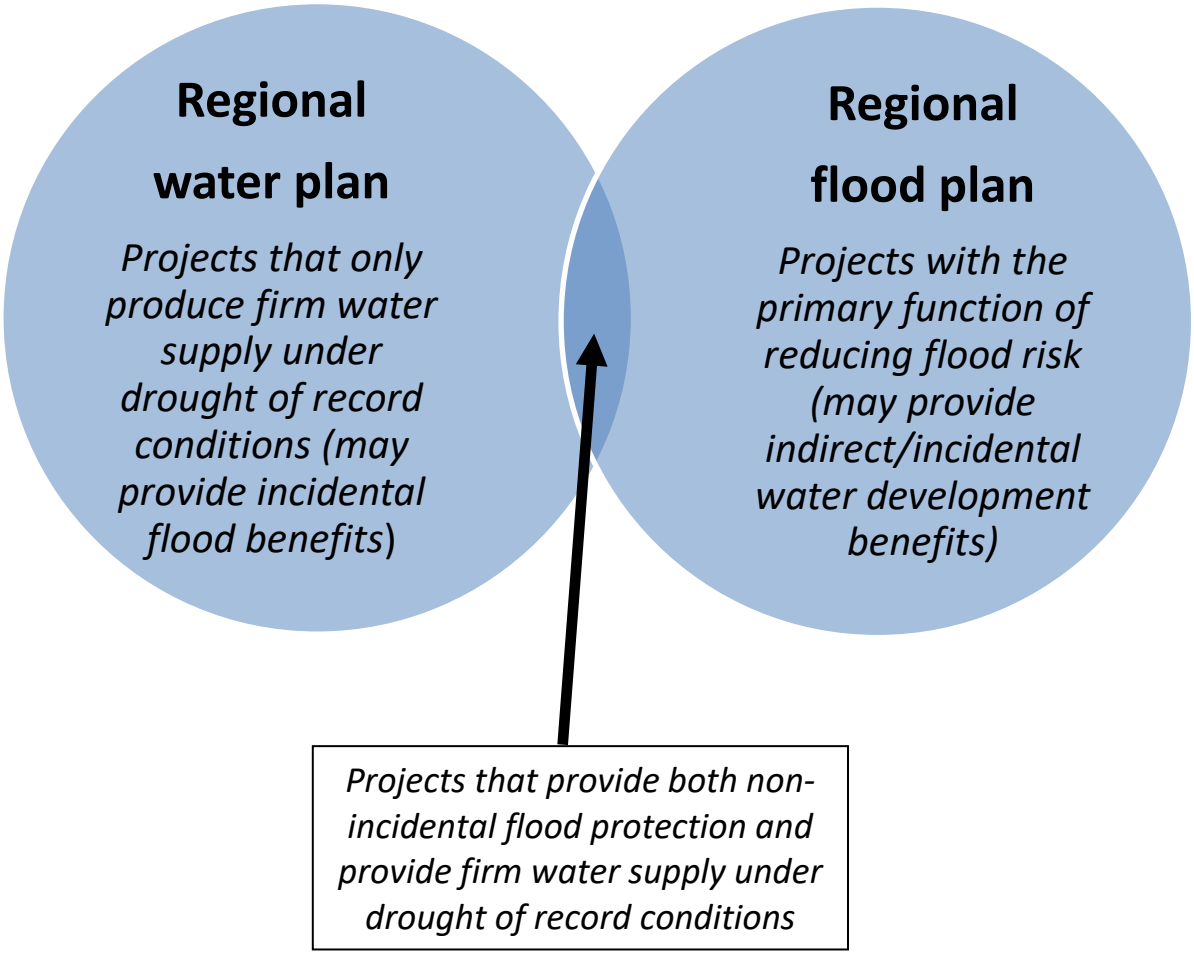
Additional Resources

For additional information on the regional water planning process and current activities, please call 512-936-2387 or visit www.twdb.texas.gov/waterplanning/rwp/index.asp.

For additional information on the regional flood planning process and current activities, please call 512-475-0145 or visit www.twdb.texas.gov/flood/planning/index.asp

[2] In addition, flood mitigation projects must not have negative effect on neighboring areas and must be permittable, constructible, and implementable.

Figure 1. Potential overlap between projects in the regional water (supply) plans and regional flood plans



JANUARY 2025

Regional Water Planning in Texas: Interregional Conflict

What is an interregional conflict?

An interregional conflict exists when

- more than one regional water plan (RWP) includes the same source of water supply for identified and quantified recommended water management strategies (WMS) and there is insufficient water available to implement such WMSs; or
- in the instance of a recommended WMS proposed to be supplied from a different regional water planning area, the regional water planning group (RWPG) with the location of the strategy has studied the impacts of the recommended WMS on its economic, agricultural, and natural resources and demonstrated to the Texas Water Development Board (TWDB) Board members (Board) that there is a potential for a substantial adverse effect on the region as a result of those impacts.

What coordination should be undertaken prior to identification of a potential interregional conflict?

During the development of their Initially Prepared Plan (IPP)—draft plan—all RWPGs are encouraged by the TWDB to coordinate with neighboring regions and to proactively identify and work cooperatively to avoid potential interregional conflicts.

The TWDB's state water planning database, which contains data from the RWPs, will be a key tool in identifying potential conflicts associated with over-allocations of sources. The TWDB may use this database and information submitted by RWPGs on their methodologies to analyze water availability to identify areas that may warrant additional interregional coordination. If such areas are identified by the TWDB, certain RWPGs may specifically be asked by the TWDB to share information on technical approaches and data development with neighboring regions prior to submitting their IPP to the TWDB.

This sharing of information may be in the form of formal or informal coordination between the RWPG technical consultants, joint RWPG subcommittee meetings, or joint RWPG meetings, for example.

TWDB staff will conduct final water source over-allocation analyses as part of the agency's review of IPPs and final RWPs and notify RWPGs.

Additionally, RWPGs are encouraged to include tabulated quantified information associated with evaluations of feasible (including recommended) WMSs in one place within the RWP to aid RWPG members, other RWPGs, the public, and TWDB staff in understanding and reviewing RWPs.

How does an RWPG identify a potential interregional conflict?

Within 60 days of the submission of IPPs to the TWDB's Executive Administrator (EA), the RWPGs shall submit in writing to the EA and the other affected RWPG the identification of potential interregional conflicts. The RWPG identifying the potential conflict must provide the following information:

- Identification of the specific recommended WMS from another RWPG's IPP.
- A statement of why the RWPG considers there to be an interregional conflict.
- Any other information available to the RWPG that is relevant to the Board's decision.

The RWPGs shall seek to resolve conflicts with other RWPGs and shall promptly and actively participate in any TWDB sponsored efforts to resolve interregional conflicts.

What process does the TWDB follow when a potential interregional conflict has been identified?

Upon receiving an assertation of an interregional conflict, the EA will review the materials submitted

by the RWPG and take a recommendation on the potential conflict to the Board.

If the Board determines that an interregional conflict exists, the EA may use the following process to commence resolution of the conflict:

- Notify the affected RWPGs of the nature of the interregional conflict.
- Request affected RWPGs to appoint a representative or representatives authorized to negotiate on behalf of the RWPG and notify the EA in writing of the appointment.
- Request affected RWPGs' assistance in resolving the conflict.
- Negotiate resolutions of conflicts with RWPGs as determined by the EA.

If negotiated resolutions are successful and confirmed by the RWPG Chairs or designated representatives, the EA will take the negotiated resolution to the Board for their considered approval to resolve the conflict.

In the event the negotiation is unsuccessful, the EA may take the following steps:

- Determine a proposed recommendation for resolution of the conflict.
- Provide notice of intent to hold a public hearing on proposed recommendations for resolution of the conflict.
- Hold a public hearing on the proposed recommendation for resolution of the conflict.
- Make a recommendation to the Board for resolution of the conflict.

The Board shall consider the EA's recommendation and any written statements by a designated representative for each affected RWPG and determine the resolution of the conflict. The Board's decision is final and not appealable. The EA shall notify affected RWPGs of the Board's decision and shall direct changes to the affected RWPs.

What steps must an RWPG take following a Board decision on conflict resolution?

In accordance with Texas Water Code § 16.053(h)(6) and direction from the TWDB, each RWPG involved will be required to prepare revisions to their respective plans and hold, after notice, at least one public hearing at a central location readily accessible to the public within their respective regional water planning areas.

The RWPGs shall consider all public and Board comments; prepare, revise, and adopt their respective plans; and submit their plans to the Board for approval and inclusion in the state water plan.

What if an interregional conflict cannot be resolved before regional water plans are finalized?

In the event that the Board has not resolved an interregional conflict early enough to allow an involved RWPG to modify and adopt its final RWP by the statutory deadline, all RWPGs involved in the conflict shall proceed with adoption of their RWP by excluding the relevant recommended WMS and all language relevant to the conflict.

Each RWPG involved must also add language to the RWP explaining the unresolved interregional conflict and acknowledging that the RWPG may be required to revise or amend its RWP in accordance with a negotiated or Board resolution of an interregional conflict.

Additional Resources

31 Texas Administrative Code, Regional Water Planning Rules, §357.10 (16), §357.50 (d), (e), and (f) (4), and §357.62: https://texreg.sos.state.tx.us/public/readtac$ext.ViewTAC?tac_view=4&ti=31&pt=10&ch=357&rl=Y

Texas Water Code, §16.053 (h) (5), (6), and (7) (A): https://statutes.capitol.texas.gov/Docs/WA/htm/WA.16.htm#16.053

For additional information, please call 512-936-2387 or visit www.twdb.texas.gov/waterplanning/rwp/index.asp.